

Vol. XIII, No. 10

PSYCHOLOGICAL REVIEW PUBLICATIONS

October 15, 1916

Psychological Bulletin

EDITED BY

SHEPHERD I. FRANZ, GOVT. HOSP. FOR INSANE

HOWARD C. WARREN, PRINCETON UNIVERSITY (*Review*)

JOHN B. WATSON, JOHNS HOPKINS UNIVERSITY (*J. of Exp. Psych.*)

JAMES R. ANGELL, UNIVERSITY OF CHICAGO (*Monographs*) AND

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RACE AND INDIVIDUAL PSYCHOLOGY NUMBER

EDITED BY R. S. WOODWORTH

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PUBLISHED MONTHLY BY THE

PSYCHOLOGICAL REVIEW COMPANY

NORTH QUEEN ST., LANCASTER, PA.,

AND PRINCETON, N. J.

AGENTS: G. E. STECHERT & CO., LONDON (a Star Yard, Carey St., W. C.);
LEIPZIG (Koenigstr., 37); PARIS (16, rue de Condé)

Entered as second-class matter January 27, 1904, at the post-office at Lancaster, Pa., under
Act of Congress of March 3, 1879

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THE
PSYCHOLOGICAL BULLETIN

GENERAL REVIEWS AND SUMMARIES

SEX DIFFERENCES IN MENTAL TRAITS

BY LETA S. HOLLINGWORTH

Teachers College, Columbia University

Since the very complete and painstaking review of the literature of sex differences which appeared in the BULLETIN in October, 1914 (11), there have been few studies undertaken with the chief aim of investigating sex differences in mental traits. Such results as have been published in the last two years are derived chiefly as incidental matter from studies prosecuted with some other main problem in view. In this field, as in other scientific fields, little has come from abroad. The few articles and monographs which have appeared in Europe under titles which would imply that they contain data on sex differences have not been accessible to the present reviewer, and it is doubtful if they are at all accessible in this country.

Researches undertaken for the purpose of obtaining developmental norms have yielded interesting data on sex differences. In the standardization of their Point Scale for measuring intelligence, Yerkes and Bridges (14) report that in their English-speaking groups girls attain higher scores than boys between the ages of five and seven; that they then tend to fall below the averages for the boys, with minor variations up to the age of eleven, when they again for a year or two surpass the boys, only to drop below once more from fourteen onward. The authors interpret this crossing and recrossing of the curves of the sexes to be a revelation of actual and reliable sex differences. As a result of their research they are "fully convinced that the accurate determination of norms for the

sexes is eminently desirable," and they "suspect that at certain ages serious injustice will be done to individuals by evaluating their scores in the light of norms which do not take account of sex differences."

Terman (9) in his experiments with 1,000 unselected children, in revising the Binet-Simon Intelligence Scale, finds a small but fairly constant superiority of the girls up to the age of thirteen years. At fourteen years the curve for the girls drops below that for the boys. The apparent superiority of boys at the age of fourteen years is, however, fully accounted for by the more frequent elimination of fourteen-year-old girls from the grades by promotion to the high school. "The superiority of girls over boys is so slight that for practical purposes it would seem negligible." Terman offers "no support to the opinion expressed by Yerkes and Bridges that 'at certain ages serious injustice will be done individuals by evaluating their scores in the light of norms which do not take account of sex differences.'" Apart from the very slight superiority of girls, Terman finds the distribution of intelligence in the two sexes to be the same. The supposed greater variability of boys is not found. "Girls do not group themselves around the median more closely than do boys."

Terman suggests that the fact that so few women have attained eminence "may be due to wholly extraneous factors," the most important of which are (1) that the occupations in which it is possible to achieve eminence are for the most part only now beginning to open their doors to women, homemaking, the traditional occupation of women, being a field in which eminence is impossible; (2) that even of the small number of women who embark upon a professional career, a majority marry and devote a large amount of their time and energy to perpetuating the species; (3) that both the training given to girls and the atmosphere in which they grow up are unfavorable to the inculcation of the professional point of view. The author also notes the possibility that the affective traits of women may be such as to favor the development of sentiment at the expense of intellectual ability.

Trabue (10) in standardizing his Completion Test Language Scales finds that on the whole boys make a somewhat lower median score than girls in the same grade, although the difference is small, and the amount of overlapping is enormous. His figures for 1,590 boys and 883 girls show that according to the quartiles there is no sex difference in variability.

Woolley and Fisher (12) report in full, in monograph form, their mental and physical measurements of working children in Cincinnati. The children were tested at fourteen years when they came to the work-certificate office to obtain certificates, and again, one year later. The physical tests applied were of height, weight, visual acuity, auditory acuity, vital capacity, steadiness of hand, strength of hand, rapidity of movement, and accuracy of movement. The mental tests included cancellation, memory, substitution, completion of sentences, association by opposites, and the puzzle-box test. Except for height at fifteen years, in which the two sexes are about the same, the girls excel the boys in height, weight, steadiness, and card-sorting, while the boys excel in strength, rapidity of movement and vital capacity. Boys excel in performances where strength is the chief factor, and girls in those where coordination and a fine control of muscles is most prominent. In the mental tests the only large sex difference in the entire series is that of the great superiority of the boys in the opening of the puzzle box. The authors feel that this test is unfairly selected on the ground of sex, as boys are more encouraged to take an active interest in mechanical construction, and accordingly understand more about how many things are made, and what the simple mechanical devices are. This would give the boys an unfair advantage on the ground of training, just as tying a bow-knot (in which Terman found girls superior to boys) would give an unfair advantage to girls.

In the preparation of a scale for the measurement of fourteen- and fifteen-year-old adolescents, Woolley (13) reports with respect to variability, that "if variability is measured by the difference between the five and ninety-five percentiles, the differences between the two sexes are small and not entirely consistent. In the physical tests the boys are a trifle more variable at fourteen, and decidedly so at fifteen. In the mental tests the boys are a little more variable at fourteen, while there is a somewhat greater difference in favor of the girls at fifteen." One fact with regard to variability holds for all series. The girls show a wider variation below the median than above it. The research covers 750 fourteen-year-olds and 680 of the same children at fifteen years of age, all being school children who were dropping out of school to go to work.

E. K. Strong, Jr. (8), publishes the results of an experiment with fragments of advertisements. Strong first exposed the advertisements to the subjects (forty women students, and a group of forty

men composed of college students, instructors and professors) at the rate of one per second. When fragments of the original advertisements were studied by these subjects, the women remembered 51 per cent. more details than did the men. The investigator then allowed the subjects to inspect another series at their leisure, giving unlimited time to look over the material. Under these conditions the women remembered 53 per cent. more details than did the men. Strong concludes that a genuine sex difference is disclosed in this experiment, but does not attempt to determine whether the difference is due to inherent capacities or to differences in training. He ascribes the more pronounced emotional response of women to advertisements, which he noted in a previous study, to their superior ability to note detail.

Among the investigations which have been undertaken for the explicit purpose of studying sex differences is Boring's experiment on capacity to report on moving pictures. Boring (1) experimented with both children and adults of both sexes, in order to make comparisons of the reliability of testimony as conditioned by sex and age. Forty-four subjects were used: thirteen women, the majority of them being undergraduates in Cornell University; eleven men, the majority of whom were graduate students of psychology or professors of psychology; twelve boys and eight girls, taken from a single class in the Ithaca public schools, and having an average age of 12.3 years.

A scene from a photo-play was presented. The subjects were not told what the purpose of the experiment was, but those who were students or professors of psychology suspected from the conditions and instructions that the test was to be one of ability to report. The traits scored were (1) range of report, (2) spontaneity of report, (3) range of knowledge, (4) accuracy of report, (5) assurance, (6) reliability of assurance, (7) warranted assurance, (8) assured accuracy, (9) tendency to oath, (10) warranted tendency to oath, (11) unwarranted tendency to oath, (12) reliability of oath.

The author concludes from the results of his experiment that "There is evidence that the boys exceed the girls in range of report, in tendency to oath, and also in unwarranted tendency to oath, and that the girls exceed the boys in reliability of oath. The significance of none of these coefficients is very high, although the last is undoubtedly reliable. With men and women the differences are more marked. The greatest difference occurs in the unwarranted tendency to oath, in which the women exceed the men. The men

exceed the women in range of report, range of knowledge, assurance, warranted assurance, assured accuracy, and reliability of oath."

"It appears, then, that there is little difference apparent, with the material used, between boys and girls, whereas there is quite a marked superiority of the men over the women with respect to six (perhaps seven) coefficients. This conclusion accords with the general psychological principle that even those mental sex differences which are large in adults are relatively slight in childhood." The author notes the fact that there is a source of error in the circumstance that the group of women was otherwise constituted than was the group of men. He nevertheless accepts the difference which he finds between the men and the women as a sex difference, although it coincides with what would be expected *a priori* from differences in age, training and preliminary knowledge of the experiment, quite apart from sex. In the group of children, where none of these factors was present, no reliable sex differences were found, except that the girls showed much greater caution in taking oath than did boys.

Gates (3) reports tests on a large number of school children of both sexes, conducted with the purpose of determining variations in diurnal efficiency. He finds no sex difference in the variations of diurnal efficiency; the records of both sexes may be combined in platting the course of the daily rhythm. The correlations of the various tests with each other also failed to reveal any sex difference. The average scores of boys and girls when compared revealed the following sex differences: "(1) In addition and multiplication the girls appear to be somewhat superior, although such is not invariably the case. (2) In the drawing test the girls appear to follow the method of emphasizing accuracy rather than speed, and the boys speed rather than accuracy. That one sex is actually capable of excelling the other in either speed or accuracy cannot be said with certainty. . . . With respect to accuracy, there is a small amount of evidence favoring the superiority of boys. (3) In the completion test the girls show a distinct superiority. (4) The girls are decidedly more efficient in cancellation. . . . (5) The girls excel without exception in memory for auditory and visual digits, and in recognition of nonsense syllables. (6) Excluding the tests for speed and accuracy of movement, in which results, as far as ability is concerned, are uncertain, out of forty-two comparisons (six classes in seven tests) the girls excel in thirty-eight, and the boys in four."

Gates (4) also reports tests on 197 students of elementary psychology, for memory of visual and auditory digits, memory of verbal sense material, recognition of geometrical forms, and learning in a substitution test. The separate correlations for the sexes are very similar. The results of the memory tests are "in harmony with the generally accepted belief that women excel in this kind of work." The men excel slightly in the substitution test, but the difference is not great.

L. S. Hollingworth (5) presents a series of tests on twenty-five subjects to determine whether any relation can be established between the mental and motor efficiency of women and the catamenial period. Twenty-three women were subjected to the tests, and two men were tested at the same time as controls. The traits tested were speed and accuracy of perception, controlled association, speed of voluntary movement, steadiness, rate of learning and muscular fatiguability. The results of the experiment are negative. No influence of menstruation upon the processes tested can be demonstrated from the data thus collected.

Pittinger (7) has made a study of the choices of occupation, the scholarship, etc., of high-school graduates in five north central states. Fewer females than males undertake courses of advanced training. Variety of training or employment is less among females than among males. Various differences in occupations selected are indicated. The most scholarly of both sexes go on to take advanced training.

Jastrow (6) has added to the general discussion of sex differences in his chapter on the psychology of group traits. He has made no systematic attempt to cite sources of authority or data. Many of the traditional views about sex differences, which were advanced before experimental data were sought, are rehearsed. The author points out that "men and women are organically different," from which he derives the conclusion that a contrasted psychology is involved. Pathology is appealed to as furnishing valuable clues to innate sex differences. For instance, "Among the typically masculine insanities is general paralysis. Its early stages parallel the symptoms of alcoholic intoxication: tremor of speech and movement; coarseness of expression; uncertainty of sensory action; and free indulgence of expansive thought. It develops quickly to the later stages with paralytic symptoms, illusions of grandeur, loss of control, and a generally disordered excessive functioning—throughout a picture of exaggerated masculine psychology." The author

seems here to imply that the greater frequency of general paralysis in men is a clue to the existence of some innate sex difference in neural functioning. In such instances the appeal to pathology fails, as the etiological factor in general paralysis of the insane is not psychological but organic. It occurs more frequently among men because syphilis occurs more frequently among them.

Brown (2) and his co-workers have carried out a series of careful experiments to investigate individual and sex differences in suggestibility. As the experiments were numerous and the technique detailed, no brief summary can be successfully presented. Those who wish to consult the data in detail must be referred to the original monograph. Brown concludes that "a general review of the entire series of twenty-six experiments reveals a very distinct difference between the sexes. In thirteen of the experiments there is a clear difference between the sexes, and in only one of these experiments are the men more suggestible. There are only four experiments in which no sex difference can be made out. . . . The difference between the sexes is more distinct in some of the groups of experiments than in other groups. There can be little doubt that women are more suggestible in tests which involve an imagined sensation, a series of progressive changes, distortion of memory, and estimation of magnitude. The tests with illusion do not give clear differences between the sexes, and the tests with aesthetic judgments give contradictory or indecisive results."

Two considerations have especially impressed the reviewer in going over these recent contributions to the literature of sex differences. The first has to do with method. Investigators seem to have acquired the habit of dividing their subjects automatically into two groups on the basis of sex. Thereupon they proceed to describe all differences found between the two groups as sex differences. As a matter of fact, differences thus found should logically be treated only as group differences, unless the author is able to show that the group of males differs more from the group of females than from other groups of males similarly selected. In general, the investigators here reviewed have not covered this technical point.

The second consideration has to do with the results bearing on the question of the comparative variability of the sexes. Terman, Trabue, and Woolley present variability figures on hundreds of boys and girls with the uniform result that neither sex is found to be more variable than the other. This is in accord with the result

derived from the researches of Courtis and Goddard, previously reviewed in the BULLETIN. More extensive and reliable data have been made available on this point in the last five years than in all time preceding.

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CHARACTER AND TEMPERAMENT

BY L. L. THURSTONE

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The technical literature on character and temperament is as scarce as the more popularized discussions of the subject are numerous. Among scientific investigators in this field we note Davenport (5) who has made a study of the inheritance characteristics of violent temper. The fact that the tendency usually does not skip a generation indicates that it is not sex-linked and that it is a dominant. That it is not a simple absence of a mono-

hybrid element is proved by the appearance of well-controlled children in the progeny of the two parents who show the outbreaks. It seems probable consequently that violent temper is due to a simple, single, positive determiner which prevents the action of the inhibitor that normally keeps the emotions under control. The best single rough criterion of a simple dominant trait is the reappearance of the trait in each generation in some of the children of an affected person. This criterion is most strikingly fulfilled by the trait that we are considering. It follows, according to Davenport, that since the tendency to violent temper does not skip generations, unaffected members of a fraternity who select an emotionally controlled consort, will only exceptionally, if ever, have affected offspring.

Burr (3) has made a study of the characteristics of misers and notes their lack of the social sense, the self-centeredness and their absence of the need of companionship. Need of money rarely, if ever, acts as an exciting cause in starting from necessity what later becomes a fixed habit. Miserliness is not an obsession, because the obsessed are affected against their wills, fight the obsession and are made unhappy, while misers enjoy. Miserliness differs of course from the true insanity in which there are delusions of poverty and the patient thinks he has not the wherewithal to get his bread.

Gowin (8) has made an interesting study of the height and weight of executives as compared with the averages of policy-holders. The executives are in general considerably taller and heavier than the intellectuals. Another very interesting tabulation is the comparison, as to weight and height, of executives of smaller importance and executives of larger responsibility. This list shows that, in both height and weight, the bishops exceed preachers in small towns, university presidents exceed presidents of small colleges, presidents of state bar exceed county attorneys, sales managers exceed salesmen and railroad presidents exceed station agents. Among the characteristics that make for executive ability the author mentions as particularly important physical prowess, a heritage from the dominance of brute strength among primitive men, which has by no means lost its effectiveness in modern society. Another factor is emotional control. The man of superior physique has more emotional reserve than the thin man and consequently the former exceeds in emotional control such as is required in executive work.

Jastrow (9) has written perhaps the most extensive systematic

treatise on character and temperament. Kerschensteiner (10) distinguishes four fundamental aspects of character. The strength of the activities of life are due to the native volitional traits, the cognitive functions give to action its particular direction, sensitivity for social values gives multiplicity of responses from which to select appropriate ones, and the perseverance tendency gives to action its consistent continuity. These four fundamentals of character should, according to Kerschensteiner, be developed by sufficient freedom in the schools to call for their exercise and development to the point of habitual attitudes. Drake (7) in a recent text on ethics distinguishes between the character of motives and character as determined by fulfilled motives in action. The latter is of course the socially significant essence of character and it is contrasted with Kant's conception of the will as purely passive and ideal.

Prince (12) interprets the Kaiser as suffering from a mild form of paranoia. The systematized delusion is in his case fear of the loss of his prerogatives as autocratic ruler of Prussia. The Kaiser's obsession is diagnosed as a subconscious phobia, a fear of democracy for himself and his house. Putnam (13) emphasizes in a popularly written book the influence of forgotten emotional experiences in moulding temperament. He suggests the Freudian psychoanalytic method for unearthing these experiences and diverting the tendencies resulting from them into socially more acceptable traits. Dearborn (6) in a small volume emphasizes the causal relationship between joy and the effective performance of the bodily functions. Its influence on temperament is explained by showing that the attitude of contentment is subject to all the laws of habit formation. Hence this factor in moulding temperament is under conscious control. Whitney (14) investigated the relationship between deportment and religious training, between deportment and home training, and between scholarship and deportment. This investigator made use of the records of about six hundred boys and six hundred girls. High correlations were found in all three of these relationships. High mentality does not necessarily correlate with good conduct, but low mentality is highly correlated with poor conduct. Whitney's conclusions are directed toward the establishment of definite instruction in ethics in the public schools. Montmorency (11) defines patriotism as a form of personality. While it is also defined as loyalty to an ideal, the possession of this trait is closely related to that of corporate spirit which is a character trait. Cody (4)

considers, among other aspects of his subject, also the applied psychology of merchandising, correspondence, personal salesmanship, and advertising. He presents at some length the practical pointers derived through experience. A considerable amount of this material constitutes good psychology although it contains little, if any, systematic work. Armstrong-Jones (1) writes on the relation of genius to insanity, pointing out that genius often goes with deficient morality. This again calls attention to the fact that there is apparently a low correlation between the extreme imaginative and associative development of genius, and the highest attainments of character development. However, Webb reports a fairly high correlation between character and intelligence for an average group of students. This shows that the correlation which is fairly high for an average group of subjects breaks down when the comparison is limited to a group selected from the extreme of either scale. However, it must be borne in mind that genius is not at all synonymous with the positive extreme of the intelligence scale.

Mrs. Blackford (2) attempts to show that the physical features of face and the general characteristics of one's bodily constitution are adequate criteria for vocational guidance. She uses such criteria as convexity and concavity of profile, fine texture and coarse texture of complexion, etc. The most serious objection against her work is that she has no statistical evidence for her assertions. If a relationship exists between certain temperamental characteristics and relative coarseness of complexion, or with concavity and convexity of profile, such a relationship should be established by correlating quantified measurements on a thousand or more cases with impartial estimates of character traits. Then, and only then, would she be justified in asserting the practical reliability of such criteria in vocational guidance. That argument against Mrs. Blackford's work which is based on the theoretically assumed impossibility of her assertions is not a valid one. If quantified estimates of character traits could be shown to have a high correlation with the physical measurements of which she makes use, then her method would have its final practical justification, whether or not it satisfied theorizing on the subject. Until such a quantitative study appears, psychological opinion about her work will be negative or at least skeptical.

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COMPARATIVE PSYCHOLOGY OF RACES

BY R. S. WOODWORTH

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We are at last beginning to get comparative mental measurements of the white and colored elements in the population of the United States. A few series of such measurements were noticed in a previous number of the BULLETIN devoted to race and kindred topics (Oct. 15, 1914), and more have since appeared.

Phillips having previously observed that the school retardation was much greater in Philadelphia schools for colored children than in those for white, now (13) applies the Binet tests to groups of white and colored children whose homes were also visited, and equates the environmental factor by pairing each colored boy with a white boy of approximately the same age and home conditions, and girls similarly. The colored group tested on the average .83 years below their chronological age in the case of the boys, and .59 years below in the case of the girls, whereas the white boys averaged .16 years above and the white girls .19 years above. The difference between the white and colored children was thus .99 years (Binet units) with boys, and .78 years with girls. Of the colored children, 68 per cent. got a Binet rating below their

chronological age, and of the white children only 43 per cent. Of a larger unselected group of 86 colored and 166 white children, from which the above-mentioned comparable groups were selected, 55 per cent. of the colored ranked a year or more behind their chronological age, and 7 per cent. a year or more ahead; while of the white children 24 per cent. ranked a year or more behind and 20 per cent. a year or more ahead. The author also reports incidental observations—without statistical evidence—to the effect that “the colored pupils as a class were good in the memory tests and poor in those requiring judgment. They were generally slower in response. The testing of the colored children took a much longer time than the white. Their reaction time was greater, they were less animated.”

A comparative study of the amount of “retardation” in grade of white and negro pupils is reported by Perring (12) from a Philadelphia school in which about a third of the pupils were negroes taught in classes along with the white children. A considerably larger proportion of the colored than of the white pupils were found to be retarded, the percentages being: for white boys 34; for white girls, 29; for negro boys, 57; for negro girls, 59. This difference between the races was more pronounced in the lower than in the upper grades, perhaps because of differences in the factor of elimination. The average degree of retardation, measured in years, was greater for the retarded negro than for the retarded white children. There were also fewer cases of acceleration among the negro than among the white children. This relative lagging of the negro in school was not due to an excess of physical defects, for the medical inspector’s record showed, curiously enough, that physical defects were more common among the white than among the negro children.

Pyle has made extensive and comparative tests of negro and white children, ages eight to sixteen, and published two brief notes (14, 16) and a somewhat fuller report (15). The negro children were pupils in the schools of three towns in Missouri. In general, the negro children scored less than the whites in the tests. The girls did better than the boys in both races, and in fact the negro girls surpassed the negro boys more than the white girls surpassed the white boys. The racial differences in the different tests varied considerably, thus in the average of both girls and boys the colored children scored in relation to the whites of the same ages the following percentages: in cancellation tests, 99; in a free association test calling for speed in continued association, 83; in logical memory,

82; in rote memory, 73; in word building, 47; in substitution tests, 46; in controlled association (average of tests for opposites, genus-species, and part-whole), 41.

Pyle's curves show that the difference between the negroes and whites tested becomes somewhat less with advancing age, as appears also in the following condensation of his data. In the average of both sexes negro children of 8 to 10 scored 50 per cent. as much as whites of the same age; negro children of 11 to 13, 59 per cent.; and negro children of 14 to 16, 73 per cent.

Pyle separated the negroes into two groups according to their social positions and found that those of the upper social class stood about midway between the whites and the poor negro group. This difference was most marked in tests for learning, association, memory and constructive imagination. The author suggests that the negroes composing the upper social class may have more white blood than the others. At all ages the boys of the two races were about equal in muscular strength and speed; and the same is true for the younger girls; negro girls surpassed white girls in strength above the age of ten, whereas white girls surpassed in speed.

In a later series of tests with a special apparatus calling for motor coördination and association the results indicated that "negro children have three fourths to four fifths the learning capacity of white children," whereas in the former series the general result gave them about two thirds of the score of the whites. The author believes that the factor of experience and environment is largely eliminated in the later tests.

Ferguson has published a full report (6) of some tests of white and negro children in the schools of Richmond, Fredericksburg and Newport News, Va., along with a discussion of the literature. The subjects were principally from the ages of 11 to 18 and were in both primary and secondary schools. Since the proportion of colored children attending school is somewhat smaller than that of the whites, and considerably smaller in case of the high school, the probability is that negro subjects represented a somewhat more selected class than the whites, especially in the upper grades. In all 486 whites and 421 colored pupils were tested with the analogy or mixed relation test, the Trabue form of the completion test, a cancellation test and a maze or steadiness test. When the white children are compared with all colored children taken together the white make a considerably better score in the mixed relation and completion tests, though this difference becomes less in the high-

school grades. Taking all groups together the colored children scored 75 to 80 per cent. of the whites in the mixed relation test and completion tests, while in the cancellation or maze tests there was no clear difference between the races. In the maze test the colored pupils worked more slowly and more accurately, whereas in the cancellation test they worked more rapidly and less accurately, but these minor differences are perhaps not significant, the general effect being that of equality between the races in these two tests. In the more intellectual tests mentioned the relative score of the negroes as compared with whites was considerably better in the upper grades and occasionally goes above par. Expressed in terms of the percentage of the colored subjects reaching or exceeding the average of the whites, we find, for example, in the mixed relation test: for Grade 5 about 20; for Grade 6, 25; for Grade 7, 14; for first year high school, 48; second, 28; third, 88; and fourth 54. In the completion test negroes do not stand as well as in the mixed relations test.

The author, being accustomed to negroes, classified his subjects into full blooded, three quarters, mulatto and quadroon on the basis of color, hair and features, and while he admits a certain margin of error in this classification, believes that it was fairly accurate. He is thus enabled to compare the standing of the full bloods and mixed bloods, and reaches the clear result that, in the more intellectual tests, success increased with the proportion of white blood. Thus in the mixed relations test the full-blooded negroes scored about 64 per cent. as much as the whites; the three-fourths negroes, 70 per cent.; the mulattos 82 per cent. and the quadroons (of whom, however, there were only a few) 96 per cent. He also found that the proportion of light-colored negroes increased from 46 per cent. in the elementary school to 59 per cent. in the high school. This indicates "that the schools select colored persons of partly white lineage to a greater extent than they select negroes, and as the grades advance the selection becomes more pronounced. This would imply that mulattoes in general are of greater ability and ambition than are pure negroes."

As regards variability, the author reaches the probable conclusion that pure negroes vary less than whites and mulattos about the same as whites; that when all colored subjects are taken together they vary more than the whites. In a concluding discussion the author suggests that the tests and school records indicate that the negro is not on an equality with the white in regard to scholastic

attainment. Following the line taken by Galton in estimating the eminence of different races and assuming that negroes average 75 per cent. of white ability, the mulattoes 87.5 per cent., he computes that there should be six mulattoes and two negroes in the United States of the degree of eminence reached by 4,464 whites.

Martin (9) reports briefly on an attempt to adapt the Binet tests to the Zulu language and conditions, finding that some tests can and others cannot be readily adapted. The children under eight years who were tested came out "at age" or within a year of age, while older children tended to fall below age, either because the tests were ill-adapted to those above the age of eight, or else because Zulu adults do not show as good relative ability as Zulu children. At all ages there was a great deal of difficulty in the test calling for comparison of weights.

Atlanta University has published a collection of several papers, reprinted from different sources, by Mall, Boas, Thomas, Chamberlin and others bearing upon the question of negro intelligence.

Stigler's work (19) on racial differences, though physiological rather than psychological, deserves mention here. Though the European is able to endure tropical life, provided he avoids malaria and other tropical diseases, he is not, as a rule, able to perform heavy labor safely. He is much more subject to heat prostration. The author seeks the cause of this racial difference. He brings together previous evidence regarding the value of the skin pigmentation of tropical peoples, with the result that pigmentation is not a protection against overheating, but only against the chemical effects of the actinic rays. The temporary pigmentation of the white man's skin exposed to sunlight, together with clothing, enables him to withstand the direct effect of tropical radiation. The real difficulty for the white man in the tropics occurs in the process of removal of heat from the body, especially the excess of heat produced in muscular activity. By experiments on (unfortunately very few) white and negro subjects performing very active exercise in overheated rooms, the author found the negro's temperature to rise somewhat less on the whole in doing a certain quantity of work, and to return more quickly to normal after the work ceased. The mechanism by which the negro accomplished his superior regulation was not clearly made out. It could not be by more abundant perspiration, since both white and negro produced an excess of sweat, *i. e.*, so much that much of it dropped from the skin before it could evaporate and cool the skin. Some evidence, not

wholly satisfactory, is cited to the effect that the blood vessels are more developed in the negro's than in the white skin; this, if true, would permit of more heat elimination by radiation and conduction. No doubt the negro's superior heat regulation is partly a native and partly an acquired trait, though it is not yet clear exactly how the effect of training comes in. The author suggests that possibly the cutaneous vasodilation after exercise is more prolonged in the case of the negro.

The book by Du Bois (4) though having little to say about the psychology of the negro is interesting because written from the negro's standpoint. It endeavors to summarize what is known regarding the history of Africa, of the slave trade and of the negroes in America both before and after enfranchisement, and to point out the achievements of the negro race as well as the difficulties with which it has to contend.

A comparison of white and Indian children by the Binet tests has been made by Rowe (18). The Indian children (mostly from 10 to 19 years old) were pupils in the U. S. Government School at Mt. Pleasant, Michigan, and the white children (mostly from five to eleven years old) were in the schools of the same town. The Indian children showed more retardation of the mental as compared with the chronological age than white children. The weakness of the Indian children seemed especially marked in tests involving comparison and definition, though these differences between the different tests were not very marked, the Indians being everywhere inferior to the whites. It should be said, however, that the Indian children tested were on the whole very much older than the white children and therefore not only likely to show more retardation in years but also, according to all experience, somewhat less susceptible to fair examination by the Binet tests. When a comparison is made between whites and Indians of the same chronological ages (ages 10 and 11 being the only ones available), however, there is still evident considerable superiority of the whites.

The book of Gobineau (7), published in 1853, now translated, advances the general thesis that different races and stocks are naturally unequal in strength and ability and that they are unaffected by environmental conditions. The decline in civilization that appears from time to time in one or another country does not mean a decline in the strength of certain stock, but the disappearance of that stock through death or dilution with weaker stock.

Jordan (8) gives three causes that can permanently lower the

force of a race: First, emigration of its stronger stock; second, immigration of inferior stock; or third, war killing off the more virile strains. Race mixture, which is often supposed to give an inferior product, does so only because the mixture commonly occurs between inferior parts of the two races. When, however, good blood from each race unites we have no evidence that the hybrid is inferior to the parent stocks. "The intermarriage of European races can hardly be called crossing at all as the racial differences concerned are of slight order, little more than temperamental at the best, and most of the traits we commonly recognize are matters of education. All those qualities which disappear in a generation in America must be chargeable to education, not to race. And, in general, other things being equal, the advantage seems to be on the side of the blended races which belong to the same general stock. Moreover, in civilized lands there are only blended races." Apparently the mulatto in America as a whole is superior to the pure negro from Africa; but the black stock is inferior to the white. "The claim is sometimes made on an assumed basis of science that all races of men are biologically equal, and that the differences of capacity which appear are due to opportunity and to education. But opportunity has come to no race as a gift. . . . Powerful strains make their own opportunity. The progress of each race has depended on its own inherent qualities. . . . Physical surroundings have played only a minor part. . . . In general, the highest range of possibilities in every field has been reached by the blonde races of Europe. Groups of less individual or of less aggregate achievement may properly be regarded as lower." It should be said that the evidence for these statements is not given in the article.

Diggs (3) is of the opinion that race is responsible for a large share of the differences between nations in such matters as language, literature, institutions, industry and religion, all these being dependent upon what he calls "mental set of a people" which in turn is dependent upon its physical constitution.

Parsons (II) gives reasons for doubting the customary assertion of civilized man that he owes his civilization to far-sightedness in contrast with the improvidence of primitive peoples. She describes the preparations made for a rain dance of the Zuñi as evidence of a long series of activities designed for a future end and involving present self-denial. Even among still more primitive tribes ceremony and magic are present, and these always mean forethought

and self-denial. The difference between modern and primitive man or rather between modern and primitive culture is in the direction taken by human providence.

Recent discussions of national differences have been influenced by the war and are, on the whole, even less worthy of the psychologist's attention than usual. An exception should be made in favor of the works by Veblen and Dewey, which are thoroughly dispassionate. Veblen (20) shows that racially Russia, Scandinavia, Germany, the Low Countries and England differ only to a very slight degree, all the races of Europe being composed of the same elements, though the darker element preponderates more towards the south and the blonde element towards the north. The differences are very slight on the east and west lines. He endeavors to reconstruct for the reader the prehistoric Baltic culture out of which, with, of course, many borrowings from the Mediterranean, the present culture of the northern countries has developed. Racially, he believes, this stock is better adapted to the conditions that obtained in this ancient culture than to the modern industrial situation.

Dewey (2) finds that the philosophy of Kant with its recognition of the "two worlds"—that of sense to be studied scientifically and that of the inner moral self to be asserted—was a formulation of a deep-seated German attitude; he endeavors to show that this formulation has had considerable influence on the further course of German political and military life. The freedom of the individual is conceived primarily as an inner thing and consistent with compliance with external authority, while duty is determined not by consideration of the consequences of actions but by an assertion of inner worth.

Ellis (5) finds two contradictory statements from German sources as to the most characteristic element of the German spirit and attitude, Goethe placing it in the idea of personal freedom, others more or less definitely in the idea that the individual exists for the State. Both of these views may be true. "The same country may at different periods and in different aspects at the same period show unlike or even opposite attitudes toward life." Thus, the typical Spanish attitude may be represented by Don Quixote or by Sancho Panza, or the typical English attitude by Shakespeare or by Milton. The German spirit oscillates between the individualistic and the socialistic and also between extreme nationalism and extreme internationalism, the latter being best illustrated by the Germany of the later eighteenth century.

"The chief feature of the Russian character," says Parker (10), "I speak of the masses, for the classes are not unlike those of other countries, *i. e.*, somewhat loose and cynical—is the presence of 'soul.' The character is genuinely religious. . . . I cannot recall any self-assertive or boastful Russians; no doubt they exist, but it is not the national characteristic to be so."

Radosavljevich (17) also finds that deep religious feeling is a marked trait of the Slavonic peoples, and as other Slavonic traits he finds indicated in the national poetry a melancholy which has nothing to do with sentimentality or pessimism, a highly developed power of suffering and a humility and patience as opposed to the haughtiness and aggressiveness of the western European nations.

Woods (21) applies his "historiometric method" to the question whether war is diminishing, by counting up the years during each decade, century, etc., since 1450, during which each of the European nations has been at war. For all the nations taken together, the war curve shows a maximum in 1550-1600, and a general decline since, interrupted by a secondary maximum in 1800-1850. A group of "lesser nations," Holland, Turkey, Spain, Poland, Sweden and Denmark, shows a pretty definite decline since 1650, coincident with the decline in their political significance; whereas the greater nations, Austria, Prussia, Russia, France and England, show on the whole much less decline in the frequency of war. Of these greater nations, Prussia and Austria do indeed show the decline, while France, England and Russia show no marked change from century to century. The author urges that in answering the question whether war shows a tendency to diminish in prevalence we must take account of long periods of history, and discount temporary ups and downs; and believes that it is impossible to infer more from the evidence than that there is a certain probability that war tends to decline. It is not certain, he maintains, that the human race desires the cessation of war; for, though men are content in times of peace, certain of their inherent "tribal and gregarious instincts" are simply dormant then. "The war instinct is probably a different thing from the fighting instinct," the latter being individualistic and bringing the individual into conflict with his immediate group, whereas the war instinct is gregarious and seeks satisfaction in the rivalry of different groups, especially of neighboring groups.

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THEORETICAL ETHNOLOGY

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The activities of ethnologists, apart from purely descriptive work, have been largely concentrated on a definition of their aims and methods in relation to those of contiguous branches of science. On the whole, there is a decided tendency to assert the autonomy of ethnology, the frame of mind of most of the writers bearing some resemblance to the attitude of the biological vitalists in rejecting a definition of life in terms of physico-chemical causality.

Foremost among English protagonists of this view stands Rivers (8). While not repudiating an ultimate psychological explanation in principle, he insists that the immediate explanation of sociological phenomena must be drawn from the realm of sociology, not from that of some other science dealing with less complicated data. A very clear and able exposition of this attitude is independently developed by Hocart (3). Like Lévy-Bruhl, Hocart will have nothing to do with the sham psychological explanations of ethnological phenomena such as are familiar to readers of Frazer. But in marked contrast to the French philosopher, Hocart does not eliminate such explanation because of any fundamental differences between "savage" and "civilized" mentality. On the contrary, to him man "is much the same all the world over." "It is precisely because savages think in the same manner as we do that they think different things," for the same processes are at work on different traditional material. It is because of this psychological unity of mankind that psychology fails to interpret ethnology, for "from an unchanging quantity it is impossible to deduce the ever changing and endless variety of custom and belief throughout the world." These can be understood only through historical research. An ultimate psychological interpretation need not be repudiated altogether; but so far as the problems of the ethnologist are concerned it is irrelevant because it is not specific.

This is essentially the point of view assumed by Wissler (11). The field of ethnology is culture—the sum-total of human activities acquired by learning. Since psychology deals with innate phenomena, the two sciences deal with distinct groups of data; psychology can merely aid ethnology by discovering what is innate and what acquired. The specific problems of ethnology, such as the invention of the bow or the origin of exogamy, can be solved only historically for "all the knowledge of the mechanism of association in the world will not tell us why any particular association is made by a particular individual." In what may be considered his anthropological confession of faith, Kroeber (4) likewise insists on the irreconcilable disharmony between ethnology and psychology, which is here taken as a representative, together with biology, of the natural as opposed to the historical branches of learning. The sole aim of ethnology is to study the phenomena of culture regardless of organic facts; its sphere is the social, the individual data having a merely illustrative value. The causality of historical ethnology is teleological, not mechanical, and there are no laws

to be discovered comparable to those of the exact sciences. This paper has evoked a spirited reply by Haeberlin (2), which vigorously protests against the hard-and-fast lines by which Kroeber separates psychology from ethnology. Psychology, he contends, is not biological in character, but as the science of *all* mental phenomena is ideally fitted to link the natural with the mental sciences. (*Geisteswissenschaften*). Intimately connected with the paper already discussed is an interesting essay by Kroeber (5) on the psychology of scientific thought. Here the gap dividing the historical from biological points of view is again emphasized. Setting out from the reluctance with which Lamarckian factors are waived in some biological quarters, Kroeber finds the origin of this attitude in a naïve confusion of organic heredity with the transmission of cultural traits within a social group. "Use inheritance" is an observed phenomenon in the sphere of cultural evolution. By a psychologically intelligible but logically unwarrantable analogy some biologists continue to transfer the social fact to the realm of organic processes. As soon as the non-rational motives for their position are realized, refutation of the doctrine of the inheritance of acquired characters becomes as unnecessary as a scientific rebuttal of prenatal influences or other quasi-scientific survivals from darker ages. A somewhat less extreme point of view than that maintained by Hocart, Wissler, and Kroeber is advanced by Lowie (6). While dismissing the current popular-psychological interpretations of cultural facts, he is inclined to expect some aid from the more rigorous methods of scientific psychology. Some ethnological data may become more intelligible when viewed from the angle of individual psychology and psychology may "act as a corrective in speculative interpretation, . . . lend greater rigor to our formulation of fact and open new prospects of inquiry and explanation." As illustrations are cited the scientific investigations of dreams and Galtonian color and number symbolism.

The question of diffusion in its various aspects continues to occupy the attention of ethnologists. The most ambitious attempt to apply the principle of cultural transmission has been made by Rivers (9), who interprets Melanesian culture as the result of successive layers of culture corresponding to distinct groups of immigrants. An important feature of his scheme is the far-reaching influence assigned to relatively small bands of immigrants. Rivers's extensive use of diffusion is especially noteworthy because of the traditional preference of the English school for explanations of similarity by the psychic unity of mankind.

A number of relatively new tendencies may be mentioned as of some psychological interest. In a programmatic article Goldenweiser (1) contrasts the emphasis currently laid on the non-rational elements of primitive psychology with the neglect—at least, for theoretical purposes—of primitive man's actual *knowledge* of the universe. A systematic survey of this phase of the lower cultures would, he suggests, be of considerable interest. Radin (7) emphasizes the desirability of studying the myths and tales of primitive peoples not exclusively from the point of view of the incidents found and their distribution, but also as literary products. This means, among other things, that the individuality of the story-teller must be considered in the same way as a critic views the personality of an author. The individuality of exceptional personalities forms the subject of Wallis's essay (10). He is concerned with the relative significance of individual initiative and the stereotyping effect of social convention,—an old problem but here broached on the basis of ethnological material.

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SPECIAL REVIEWS

Character and Intelligence. EDWARD WEBB. Brit. J. of Psychol., Mono. Suppl., 1915, 1. (No. 3). Pp. 99.

This monograph presents one of the most elaborate attempts to quantify the exceedingly complex conative attributes of mentality by means of the best available statistical methods. Webb's main contribution is the statistical evidence for postulating a general conative factor, revealed by the method of correlation of correlations, which on the side of character, corresponds in its generality as a determinant of behavior, to the general intelligence factor, derived from mental tests by Hart and Spearman, Burt and others.

The subjects from whom Webb collected his data were two hundred students in a teachers' training school in London, and a group of 140 boys. Forty character traits of the training school students were assessed by a small group of prefects, the latter being officers elected by the student body and performing disciplinary and minor administrative duties. The character traits of the boys were assessed by two of the masters at each of the boys' schools. A series of mental tests were given to supply data for correlating intelligence attributes with character traits.

With the data so collected Webb tabulates with considerable completeness the correlations of every attribute with every other attribute, as well as the probable errors, and a reliability coefficient for each estimate.

Evidence for the existence of an intellective factor as a psychological entity is derived from the mental test data by correlating the columns of correlations according to the method of Hart and Spearman. This enables the author to compute the saturation coefficients of the character traits with the calculated general intelligence factor "g." Among the interesting findings in this regard these may be cited as correlating highly with general intelligence: power of getting through mental work rapidly, general tendency to be cheerful, desire to excel at performances in which the person has his chief interest, belief in his own powers, intensity of influence on special intimates, degree of esthetic feeling, degree with which one works with distant objects in view. Among the traits correlating negatively with intelligence we find: tendency to quick oscillation

between cheerfulness and depression (as opposed to permanence of mood), degree of bodily activity in pursuit of pleasure, occasional liability to extreme depression. Among the traits which show practically zero correlation with general intelligence and which in consequence are to be considered as quite independent of intelligence are: tact in getting on with people, occasional liability to extreme anger, readiness to become angry, readiness to accept sentiment of associates, physique.

By applying the method of correlation of correlations to a selected list of character traits Webb finds substantial evidence for the existence of a general factor on the side of character. One might at first conclude that the common factor among character traits so revealed is caused by the general intellectual factor extending its influence into the conative attributes. In order to ascertain whether this is actually the case Webb computes the partial correlations between the character traits, eliminating the influence of the calculated intellectual factor. These partial correlations are again subjected to the procedure of Hart and Spearman with the result that the correlations, when corrected for attenuation, remain as before, hovering close to unity. Webb's conclusion is that a general factor on the side of character exists as a measurable psychological entity and that it is demonstrably distinct from the general intellectual factor.

The physiological nature of the second general factor, which Webb proposes to designate "w," is distinctly a speculative matter. The correlations can undoubtedly reveal the existence of a common causal factor for character traits, but the nature of this factor must be inferentially arrived at by the interpretation of the correlations. Webb defines his second common factor tentatively as "persistence of motive." This interpretation is read into the perseveration tendency of ideas of Müller and Pilzecker.

It would be inappropriate to criticize dogmatically the painstaking statistical procedure of Webb's work. However, the conclusion concerning the second conative common factor would be considerably more convincing if the author had retained throughout the course of his work the comprehensive list of traits with which he starts out. As it is, the long list of forty character traits assessed by the judges dwindles down to eight in the table from which the crucial evidence concerning the second common factor is derived.

The author does not give us a table of saturation coefficients for

the several character traits with reference to the new common conative factor. Such a table, when compared with the table of saturation coefficients for the same traits with reference to the intellectual common factor, would throw much light on the makeup of the traits, and would be serviceable for practical diagnostic purposes. If some character trait could be found which possesses a saturation coefficient with the conative general factor comparable with the high saturation coefficient of reasoning tests with the intellectual common factor, such information would throw light not only on the nature of a possible conative factor, but would be serviceable in defining the essence of character.

If the conative common factor should succeed in establishing itself as a psychological entity beside that of the intellectual common factor, then we would be forced to give up the unifocal interpretation of mentality in favor of a multi-focal interpretation. In case common factors should multiply with unexpected fecundity we would have a state of affairs demanding a non-focal interpretation of mentality in which case every list of related attributes would yield its own common factor. Again, if future developments should reveal the existence of a limited number of definable common factors, then we would virtually be returning to a modernized faculty psychology. Before the proposed conative general factor can be accepted it will be necessary to derive it from a more comprehensive set of character traits than the list of eight used by Webb for this purpose.

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CARNEGIE INSTITUTE OF TECHNOLOGY

Paradoxical Pain. R. M. HARBIN. Boston: Sherman, French, 1916. Pp. xxiv + 212.

Many books can be readily classified and summarized. This is not one of that kind. It deals with such diverse topics as digestion, parturition, fatigue, phagocytosis, intellectual effort, defeat, anxiety, pain in religion, altruism, warring for peace, temptation, remorse, death, divine discontent, immortality, and eighteen other topics within the confines of its 212 pages. Although by a surgeon it leaves the impression that it consists of notes for sermons, or that the deeply religious trend of the author has been the force compelling its publication.

The pain which is dealt with is both physical and mental, the latter not always being differentiated from the former. Pain is

necessary for the development of the individual; the "man who never allows himself to get very hungry will not attain the highest degree of digestion"; "pain relieves pain"; "where pains are mental the patient suffers from fears and doubts"; a patient "recovered by reeducating his sense of pain"; "man is impelled by two motives in his psychic actions: the avoidance of pain and the pursuit of pleasure."

The book has no value for the trained psychologist, it may appeal to that widening circle of readers of pseudo- or near-psychology.

SHEPHERD IVORY FRANZ

GOVERNMENT HOSPITAL FOR THE INSANE

Manual of Vital Function Testing Methods and Their Interpretation.

W. M. BARTON. Boston: Badger, 1916. Pp. 255.

Although intended for the use of physicians this work may be found by psychologists useful in studying certain functions of the body which are not open to direct observation. With the development of objective psychology many indirect methods must be used, and for ascertaining relations of mental conditions and physiological activities of certain parts of the body this little work will supply suggestions of method. The five parts deal respectively of liver function, kidney function, pancreatic function, heart function, and ductless gland function. In connection with any projected work on the relations of the ductless glands to emotional states some of the tests described may be of use, and similarly with respect to the relations of abnormal mental states to degrees of hypo- and hyper-function. The footnote references are sufficient to enable one who is interested in any matter to look up original sources and to extend the accounts of methods and results. In view of the importance which has been placed upon the conditioned reflex and the prominence given to the study of this reflex action of the salivary glands it is regrettable that the author has not included in his book any consideration of the saliva.

SHEPHERD IVORY FRANZ

GOVERNMENT HOSPITAL FOR THE INSANE

Nervous Children; Prevention and Management. B. R. TUCKER.

Boston: Badger, 1916. Pp. 147.

This is one of the better class of popular works dealing with the subject of nervous and mental disorders of children. Ten

chapters give the main points of the subject but there are no references to other works to which the less casual reader may go for further or more detailed information. Three chapters are devoted to the general consideration of the structure and functions of the nervous system, heredity and environment, and nervous and mental development. One chapter each is devoted to the defective and feeble-minded, certain nervous and mental diseases of childhood, the cause and prevention of nervousness in children, the training of nervous children, habit, eugenics and sexual hygiene, and puberty and adolescence.

Different bad habits which children frequently exhibit are discussed under the chapter on "habit" which is defined as follows: "Habit, both good and bad, is the expression of the desire of the individual, according to his light, to better his condition." The author advocates some instruction in eugenics for children, and some slight instruction in sexual matters. With regard to the latter he says that we must "simply attempt to solve the problems as best we may, and then see what effect this question of sex instinct has upon the nervous, mental and moral life of children as they grow and develop into adults." The author shows caution in making definite rules for special cases and wisely suggests that all abnormal children be given the benefit of the advice of specialists.

SHEPHERD IVORY FRANZ

GOVERNMENT HOSPITAL FOR THE INSANE

BOOKS RECEIVED

- SIDIS, B. *The Causation and Treatment of Psychopathic Disorders*. Boston: Badger, 1916. Pp. 418. \$2.50.
- United States Life Tables*. Washington: Govt. Printing Office, 1916. Pp. 65.
- WASHBURN, M. F. *Movement and Mental Imagery*. Boston: Houghton Mifflin, 1916. Pp. xv + 252. \$1.75.
- WOODS, J. H. *The Yoga System of Patañjali, or the Ancient Hindu Doctrine of Concentration of Mind*. Cambridge, Mass.: Harvard Univ. Press, 1914. Pp. xli + 384.
- RICKLIN, F. *Wishfulfillment and Symbolism in Fairy Tales*. (Trans. by W. A. White.) New York: Nerv. & Ment. Dis. Pub. Co., 1915. Pp. 90. \$1.00.
- MEADER, A. E. *The Dream Problem*. (Trans. by F. M. Hallock & S. E. Jelliffe.) New York: Nerv. & Ment. Dis. Pub. Co., 1916. Pp. 43. 60 cents.
- Teachers Year Book of Educational Investigations*. New York: Department of Education, 1916. Pp. 52.
- MAXWELL, J. *La Philosophie Sociale et la Guerre Actuelle*. Paris: Alcan, 1916. Pp. vii + 207. 3 fr. 50.
- BROWN, W. *Individual and Sex Differences in Suggestibility*. Univ. of Calif. Publ. in Psychol., 2, 1916, 291-430.
- TREVES, Z. & SAFFIOTTI, F. U. *La "Scala Metrica dell' Intelligenza" di Binet e Simon*. Milan: Civelli, 1911. Pp. 67.
- SAFFIOTTI, F. U. *La Misura dell' Intelligenze nei Fanciulli*. Roma: Soc. Rom. di Antropologia, 1916. Pp. viii + 286.
- JONES, G. E. *Training in Education*. Univ. of Pittsburgh Bull., 12, 1916, No. 17. Pp. 113.

NOTES AND NEWS

THE present number of the Bulletin, dealing with Race and Individual Psychology, has been prepared under the editorial direction of Professor R. S. Woodworth, of Columbia University.

AT the end of the course on speech disorders given at the Boston Psychopathic Hospital, a series of ten papers on stuttering and similar speech defects were read by Dr. W. B. Swift and assistants.

PROFESSOR G. M. WHIPPLE, of the University of Illinois, has been given an appropriation by the General Education Board for the purpose of studying the school possibilities of the unusually gifted child.

DR. KARL M. DALLENBACH, of the Ohio State University, has been appointed instructor in psychology at Cornell University.

PROFESSOR B. T. BALDWIN, of Swarthmore College, has been appointed lecturer in education at Johns Hopkins University, where he will give a course on physical and mental measurements, tests, and scales.

PROFESSOR F. C. DOCKERAY has been advanced to the grade of associate professor at the University of Kansas.

PROFESSOR R. M. OGDEN, of the University of Kansas, has been appointed professor of education and head of the department at Cornell University.

DR. CLARA HARRISON TOWN has been appointed psychologist in the Orthogenic Clinic of the Rush Medical College, University of Chicago.

PROFESSOR JOSIAH ROYCE, of Harvard University, died on September 14, at the age of 59.

DR. H. HEATH BAWDEN has removed to Carmel-by-the-Sea, Monterey Co., Calif.

DR. W. T. SHEPHERD, professor of philosophy and psychology at Waynesburg College, has resigned to take up private school work in Washington, D. C.

A CONFERENCE on aspects of psychological examining will be held at the Massachusetts School for Feeble-Minded, Waverley, Mass., on October 28. Twelve papers will be read by R. M.

Yerkers, E. E. Southard, S. L. Pressy, C. S. Rossy, R. S. Hardwick, F. Mateer, L. Wood, J. M. Curtis, and M. H. Rossy.

THE American Psychological Association will meet at Columbia University on December 27 to 30. This being the twenty-fifth annual gathering of the Association, the occasion will be marked by appropriate exercises which are scheduled to occur on Thursday afternoon, December 28. On the evening of the same day there will be a banquet at the Hotel Marseilles, 103rd Street and Broadway, New York City. This hotel has also been named as headquarters. The address of the President of the Association, Professor Raymond Dodge, of Wesleyan University, upon "The Laws of Relative Fatigue" has been set for Wednesday evening, December 27, and will be followed by the annual business meeting and a smoker. Communications regarding the program of the meeting should be addressed to Professor R. M. Ogden, Secretary, at Cornell University, Ithaca, N. Y.; those regarding the local arrangements to Professor H. L. Hollingworth, at Barnard College, Columbia University, New York City.

THE following items have been taken from the press:

A. CHARPENTIER, professor of medical physics at the University of Nancy, has died at the age of 64. His work dealt mainly with light and vision.

THE Boston City Council has passed an ordinance that will give the city police court a medical department and psychological laboratory. All offenders will pass through this department, the verdict of which as to their mental condition will be taken into consideration before sentence is pronounced. Dr. Victor V. Anderson is appointed as head.

